

SECTION 10650

OPERABLE PARTITION

PART 1 GENERAL

1.01 RELATED DOCUMENTS

- A. All applicable provisions of the Bidding and Contract Requirements, and Division 1 - General Requirements shall govern the work under this section.

1.02 DESCRIPTION OF WORK

- A. Provide all labor, materials, necessary equipment and services to complete the operable walls, as indicated on the drawings, or as specified herein or both.
- B. Related work by others:
 - 1. Section: Masonry/Concrete.
 - 2. Section: Metal framing and gypsum board wall systems other than over the operable wall partitions.
 - 3. Section: Primary structural support, including pre-punching of support members by structural steel supplier per operable wall supplier's template.
 - 4. Section: All heads, blocking, jambs, track enclosures, surrounding insulation and sound baffles.
 - 5. Section: Painting of trim, gypsum drywall and other adjacent materials.

1.03 QUALITY ASSURANCE

- A. The operable walls herein specified shall be furnished and installed by an authorized local distributor licensed by the operable wall manufacturer. Local distribution is required to insure prompt project coordination and future customer service.

1.04 ACCOUSTICAL PERFORMANCE

- A. Laboratory acoustical performance of the operable wall shall have been tested in an independent acoustical laboratory in accordance with ASTM E90 test procedure, and shall have attained an STC rating of no less than 51. A written test report by the test facility shall be available upon request.

1.05 SUBMITTALS

- A. Shop drawings: submit shop drawings fully describing partition fabrication, layout, and installation. Include details of track, trolleys, hardware, etc. Indicate loading to be imposed in the supporting structure. Show all anchorage, accessory items, caulking, and finishes.

PART 2: PRODUCT

2.01 ACCEPTABLE MANUFACTURER

- A. Manufacturer: Modernfold, Inc.
- B. Product: Acousti-Seal 933 operable wall.

2.02 OPERATION

- A. Operable wall shall be a series of hinged pair flat panels, manually operated, top supported with static floor seals.

2.03 PANEL CONSTRUCTION

- A. Panels shall be nominal 3.25" (83mm) thick in manufacturer's standard width 48" (1220mm) maximum. All panel horizontal and vertical framing elements shall be formed steel.
- B. Panel skin shall be (select one):
 - 1. 0.50" (13mm) tackable gypsum board, class "A" rated single material or composite layers continuously bonded to panel frame.
- C. Panels hinges shall be full leaf butt hinges, attached directly to panel frame. Welded hinge anchor plates within panel shall further support hinge mounting to frame. Hinges mounted into panel edge or vertical astragal are not acceptable.
- D. Panels shall not require trim on the vertical edges and shall create a minimal groove at panel-to-panel joints.
- E. Panel weight shall be 5 to 11 lb./sq.ft.

2.04 PANEL FINISH

- A. Panel finish shall be factory applied, class "A" rated material. Finish shall be:
 - 1. Reinforced heavy duty vinyl with woven backing weighing not less than 27 ounces per lineal yard.

2.05 SOUND SEALS

- A. Vertical interlocking sound seals between panels (astragals) of a reversible tongue and groove configuration shall be required in each panel edge, permitting universal panel operation. Astragals shall be steel for maximum durability and fire resistance. Rigid plastic astragals or astragals in only one panel edge are not acceptable.
- B. Horizontal top seals shall be continuous contact extruded vinyl bulb shape with pairs of non-contacting vinyl fingers to prevent distortion and no mechanically operated parts.
- C. Horizontal bottom floor seals shall be automatic operable seals providing nominal 1.50" (38mm) operating clearance with an operating range of +0.50" (13mm) to -1.00" (25mm) and shall automatically drop as panels are positioned (standard).

2.06 SUSPENSION SYSTEM

(#17 Suspension System)

- A. Track shall be minimum 11 ga. roll-formed steel. Extruded aluminum track is not acceptable. Track shall be capable of either direct mounting to a wood header or shall be supported by adjustable steel hanger brackets connected to structural support by pairs of

0.38" (10mm) diameter threaded rods. Brackets must support the load bearing surface of the track.

- B. Exposed track soffit shall be all steel, integral to the track and prime painted. Wood or aluminum soffits are not permitted.
- C. Trolleys shall be all-steel trolley with steel tired ball-bearing wheels. Non-steel tires are not acceptable.

PART 3: EXECUTION

3.01 PREPARATION

- A. Preparation of opening shall be by general contractor. Any deviation of site conditions contrary to approved shop drawings shall be called to the attention of the architect.

3.02 DELIVERY AND STORAGE

- A. Delivery to the job site shall be coordinated by general contractor. Proper storage of partitions before installation and continued protection during and after installation shall be the responsibility of the general contractor.

3.03 INSTALLATION

- A. Installation shall be by an authorized factory trained installer. Installation shall be in accordance with ASTM E557 installation procedure.

3.04 WORKMANSHIP

- A. The complete installation of the operable wall system as called for and detailed on the drawings shall be provided in strict accordance with the drawings and manufacturers standard printed specifications, instructions and recommendations.

END OF SECTION



SECTION 10650

OPERABLE PARTITIONS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Continuously hinged panel partitions, manual operation.

1.2 RELATED SECTIONS

- A. Section 03300 - Cast-In-Place Concrete; concrete tolerances required.
- B. Section 05500 - Metal Fabrications; primary structural support, including pre-punching of support members by steel supplier in accordance with template supplied by operable partition supplier's template.
- C. Section 06100 - Rough Carpentry; wood framing and supports, and blocking at head and jambs as required.
- D. Section 09260 - Gypsum Board Assemblies; metal framing and gypsum board wall systems adjacent to operable partitions, including blocking and insulation.
- E. Section 09260 - Gypsum Board Assemblies; wall and ceiling framing at head and jambs.

1.3 REFERENCES

- A. ASTM E 90 - Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements.
- B. ASTM E 557 - Standard Practice for the Installation of Operable Partitions.

1.4 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Material descriptions, construction details, finishes, installation details, and operating instructions for each type of operable partition, component, and accessory specified.
- C. Shop Drawings: Show location and extent of operable partitions. Include plans, elevations, sections, details, attachments to other construction, and accessories. Indicate dimensions, weights, conditions at openings, and at storage areas, and required installation, storage, and operating clearances. Indicate location and installation requirements for hardware and track, including floor tolerances required and direction of travel. Indicate blocking to be provided by others.
- D. Setting Drawings: Show imbedded items and cutouts required in other work, including support beam punching template.
- E. Samples: Color samples demonstrating full range of finishes available to Architect. Verification samples shall be available in same thickness and material indicated for

the work.

1.5 QUALITY ASSURANCE

- A. Installer Qualifications: An experienced installer who is certified in writing by the operable partition manufacturer, as qualified to install the manufacturer's partition systems for work similar in material, design, and extent to that indicated for this Project.
- B. Acoustical Performance: Test operable partitions in accordance with ASTM E 90 test procedure to attain no less than the STC rating specified. Provide a complete and unedited written test report by the testing laboratory upon request.
- C. Preparation of Opening: Conform to ASTM E 557.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Clearly mark packages and panels with numbering systems used on Shop Drawings. Do not use permanent markings on panels.
- B. Protect panels during delivery, storage, and handling to comply with manufacturer's instructions and as required to prevent damage.

1.7 WARRANTY

- A. Provide operable partition manufacturer's written warranty agreeing to repair or replace components with manufacturing defects for a period of two years from the date of shipment to the Project.

PART 2 PRODUCTS

2.1 MANUFACTURER

- A. Acceptable Manufacturer: Modernfold, Inc., which is located at: 215 W. New Rd. ; Greenfield, IN 46140; Toll Free Tel: 800-869-9685; Tel: 317-468-6700; Fax: 866-410-5016; Email: info@modernfold.com; Web: www.modernfold.com
- B. Requests for substitutions will be considered in accordance with provisions of Section 10650.

2.2 CONTINUOUSLY HINGED PANEL PARTITIONS, MANUAL OPERATION

- A. Product: Acousti-Seal 933 Operable Partition by Modernfold, Inc., manually operated series of continuously hinged flat panels, top supported with operable floor seals.
- B. Panel Construction and STC Rating: Nominal 3 inch (76 mm) thick in manufacturer's standard 48 inch (1220 mm) width by height required, with horizontal and vertical framing elements fabricated from 18 gage formed steel with overlapped and welded corners; reinforced top channel to support suspension system components; frame with concealed formed steel at vertical edges.
 - 1. Panel Skin: Nominal 21 gage formed steel wrapping around panel edge, with panel skins lock-formed and welded directly to the frame for unitized construction with minimum STC as follows:
 - a. STC 52.
 - 2. Hinges for Closure Panels for Steel Panels: SOSS invisible laminated hinge with anti-friction segments mounted between each heat treated link. Attach hinge directly to panel frame, with welded internal hinge bracket to support

- hinge and allow for adjustment of hinge plates. Concealed hinges mounted into panel edge or vertical astragal are not acceptable.
3. Panel Trim: No vertical trim required or allowed on vertical edges of panels; minimal groove appearance at panel joints.
 4. Panel Weight: As standard with manufacturer for STC selected, 6.5 to 11 pounds per sq ft.
- C. Panel Finish and Exposed Trim: Factory applied, Class A rated material and as follows:
1. Panel Finish: Wall covering and upholstery fabric weighing not less than 12 ounces per lineal yard, with surface treatment to resist stains.
 2. Exposed Panel Trim Color: Dark bronze.
- D. Sound Seals and Bottom Seals:
1. Vertical Interlocking Sound Seals Between Panels: Roll-formed steel astragals, with reversible tongue and groove configuration in each panel edge for universal panel operation. Rigid plastic or aluminum astragals or astragals in only one panel edge are not acceptable.
 2. Horizontal Top Seals: Continuous contact extruded vinyl bulb shape with pairs of non-contacting vinyl fingers to prevent distortion without the need for mechanically operated parts.
 3. Horizontal Bottom Floor Seals: Modernfold IA2 Bottom Seal. Automatic operable seals providing nominal 2 inches (51 mm) operating clearance with an operating range of plus 0.50 inches (13 mm) to minus 1.50 inches (38 mm) which automatically drop as panels are positioned without the need for tools or cranks.
- E. Suspension System and Soffits:
1. Suspension System: Modernfold No. 17 Suspension System:
 - a. Track: Nominal 11 gage formed steel track, suitable for either direct mounting to wood header or supported by adjustable steel hanger brackets, supporting the load-bearing surface of the track, connected to structural support by pairs of 0.38 inches (10 mm) diameter threaded rods.
 - b. Exposed Track Soffit: Steel, removable for service and maintenance, attached to track bracket without exposed fasteners and pre-painted off-white. Wood or aluminum soffits are not acceptable.
 - c. Carriers: One all-steel trolley with steel tired ball-bearing wheels for all panels except hinged panels. Non-steel tires are not acceptable.
- F. Special Components:
1. Single Pass Door: Same thickness and appearance as panels. Trimless ADA compliant pass door with friction latch and flush pulls for panic operation. Threshold is not acceptable.
- G. Pocket Doors: Acousti-Seal 900 Series Pocket Door by Modernfold, Inc., with the same general construction as the adjacent panels with the following characteristics:
1. Manual Operation: Type I single door hinged to a jamb on one side as required.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Do not begin installation until supports and substrates have been properly prepared.
- B. Notify Architect in writing of unsatisfactory preparation prior to installation. Do not

proceed until unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Install in accordance with manufacturer's instructions and ASTM E 557 installation procedures. Test for proper operation and make necessary adjustments until satisfactory results are obtained.

3.3 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION